

**INDIVIDUAL PROPERTY/DISTRICT
MARYLAND HISTORICAL TRUST
INTERNAL NR-ELIGIBILITY REVIEW FORM**

Property/District Name: Harford Run Headwall and Drain Survey Number: B-5054

Project: _____ Agency: _____

Site visit by MHT Staff: ☐ no ☐ yes Name _____ Date _____

Eligibility recommended ☒ X Eligibility not recommended ☐

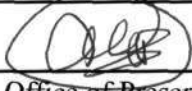
Criteria: ☒ A ☐ B ☒ C ☐ D Considerations: ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G
☐ None

Justification for decision: (Use continuation sheet if necessary and attach map)

The Harford Run Headwall and Drain have been reviewed twice by the Maryland Historical Trust Office of Preservation Services through the Section 106 process. The Drain is located in Baltimore City under Central Avenue. It represents one of the earliest public works projects undertaken by the City of Baltimore, beginning in 1820, to control storm water and sewage treatment in the central part of the City. Baltimore continued to expand the drain, which is a brick lined arch carrying portions of Harris Creek to the Patapsco River and Baltimore Harbor, between 1820 and 1888. Following the annexation of Canton into the City, additional waste water management works, including the Lakewood Avenue Drain were built to accommodate the growing need for such sanitary improvements. Therefore, the Harford Run Headwall and Drain are eligible for inclusion in the National Register of Historic Places under Criterion A, as an early example of Baltimore City's public works and waste water management treatments, and also under Criterion C, as an engineering example.

Documentation on the property/district is presented in: Project Review and Compliance Files and Compliance Reports

Prepared by: _____

Anne E. Bruder  December 18, 1998
Reviewer, Office of Preservation Services Date

NR program concurrence: ☒ yes ☐ no ☐ not applicable

B. Kuntz 12/18/98
Reviewer, NR program Date



Survey No. B-5054

MARYLAND COMPREHENSIVE HISTORIC PRESERVATION PLAN DATA - HISTORIC CONTEXT

I. Geographic Region:

- ☐ Eastern Shore (all Eastern Shore counties, and Cecil)
☐ Western Shore (Anne Arundel, Calvert, Charles, Prince George's and St. Mary's)
☒ Piedmont (Baltimore City, Baltimore, Carroll, Frederick, Harford, Howard, Montgomery)
☐ Western Maryland (Allegany, Garrett and Washington)

II. Chronological/Developmental Periods:

- ☐ Paleo-Indian 10000-7500 B.C.
☐ Early Archaic 7500-6000 B.C.
☐ Middle Archaic 6000-4000 B.C.
☐ Late Archaic 4000-2000 B.C.
☐ Early Woodland 2000-500 B.C.
☐ Middle Woodland 500 B.C. - A.D. 900
☐ Late Woodland/Archaic A.D. 900-1600
☐ Contact and Settlement A.D. 1570-1750
☐ Rural Agrarian Intensification A.D. 1680-1815
☒ Agricultural-Industrial Transition A.D. 1815-1870
☒ Industrial/Urban Dominance A.D. 1870-1930
☐ Modern Period A.D. 1930-Present
☐ Unknown Period (☐ prehistoric ☐ historic)

III. Prehistoric Period Themes:

- ☐ Subsistence
☐ Settlement

☐ Political
☐ Demographic
☐ Religion
☐ Technology
☐ Environmental Adaptation

IV. Historic Period Themes:

- ☐ Agriculture
☒ Architecture, Landscape Architecture, and Community Planning
☐ Economic (Commercial and Industrial)
☒ Government/Law
☐ Military
☐ Religion
☐ Social/Educational/Cultural
☐ Transportation

V. Resource Type:

Category: Structure
Historic Environment: Urban
Historic Function(s) and Use(s): Waste water management
Known Design Source: _____

Historical Summary of the Harford Run Drain (National Register Eligible)

As early as 1792, Harford Run is delineated on a map of Baltimore produced by Frenchmen A.P. Folie and James Poupard (**Figure 1**). Still following its natural courses, the stream borders Eden Street to the west and is depicted as a sinuous stream that winds down a sunken bed. By 1822, however, Lucas Fielding's map of Baltimore (**Figure 2**) reveals that the natural situation of the Harford Run had been dramatically modified when a north/south canal was cut through the middle of what was then known as Canal Street (now known as Central Avenue). The canal, bridged by the east/west city streets and avenues, extended from the city docks along Lancaster Street as far north as Jefferson Street where Harford Run resumed its natural condition.

An 1848 Baltimore map published in the 1869 edition of *Appleton's Hand-Book of American Travel* (**Figure 3**) indicates that the canal was still present (see www.reisenett.no/map_collection/historical/Baltimore_1869.jpg). Immediately to the west of the canal, the 1848 map also clearly shows a streetcar or railroad line extending from the city docks along Lancaster Street along Canal Street to Monument Street and then turning west until it intersected with North Street. In a birds-eye lithograph of Baltimore by E. Sachse & Co published in 1870 (**Figure 4**), this streetcar/railroad line is not evident and the canal appears to have been covered and enclosed between Jefferson Street and Eastern Avenue. Judging from modern investigations of the drain, the drain was constructed of brick and/or ashlar (cut, faced stone) with the arch springing from short side-walls of stone or brick. If the lithograph is correct, that the drain was in fact constructed around 1870, then this phase of the Harford Drain was probably not devised by Charles Hazletine Latrobe, Chief Engineer of the Jones Falls Commission from 1875

to 1899. The 1870 lithograph also reveals that the street had been renamed Central Avenue – another indication that the bisecting canal had been filled and replaced with a drain.

By 1879-1880, the Sanborn Map Company map (**Figures 5 & 6**) of Baltimore depicts the last vestiges of an open Harford Run as far north as Chew Street. Following an irregular route, the run at this point was largely covered over, although some portions remained open (see the block circumscribed by N. Spring, Madison, N. Eden, and Monument Streets and near the Happ & Sanlin Tannery as well as the block circumscribed by N. Eden, Jefferson, N. Central, and Orleans Streets). While the earlier maps suggested the canal extended as far north as Jefferson Street, the 1879-1880 Sanborn indicates that the stream did not meet the canal head until at least Orleans Street. Just north of Fleet Street, meanwhile, a notation on the 1879-1880 Sanborn Map of Baltimore reads "FROM HERE ARCH OVER STREAM". (**Figure 7**) By 1890, the northern stretches of Harford Run were no longer noted on the Sanborn maps and were entirely converted into subterranean wastewater drains. (**Figure 8**) The southern most portions of the canal, between Eastern and Lancaster Streets were not covered until after the 1950s. (See www.btco.net/ghosts/streets/central/canal.html.)

In many ways the channelization of Harford Run and its modification from a natural stream to canal to polluted storm/waste water drain, epitomizes the progression of Baltimore's urban hydrology and the engineering attempts to afford the city's residents and industries adequate storm and waste water disposal. Interestingly, from the eighteenth century until around 1870, Harford Run appears to have served as a transportation route for barges going between the industries that lined Canal Street (later Central) Avenue. Judging from the 1879-1880 Sanborn maps, the Run also served as a dumping ground for industrial and residential wastes. Various factories and tanneries as

well as residential sewage was undoubtedly piped into the canal until the city separated sewage inputs from its wastewater conduits after 1915. The covering of the canal by a smaller arched drain around 1870, indicates that the canal no longer served its purpose as a viable transportation route and was quickly becoming a health hazard. The current project to replace the structurally failing drain will consist of installing a modern concrete conduit thus increasing the drain's hydraulic capacity.

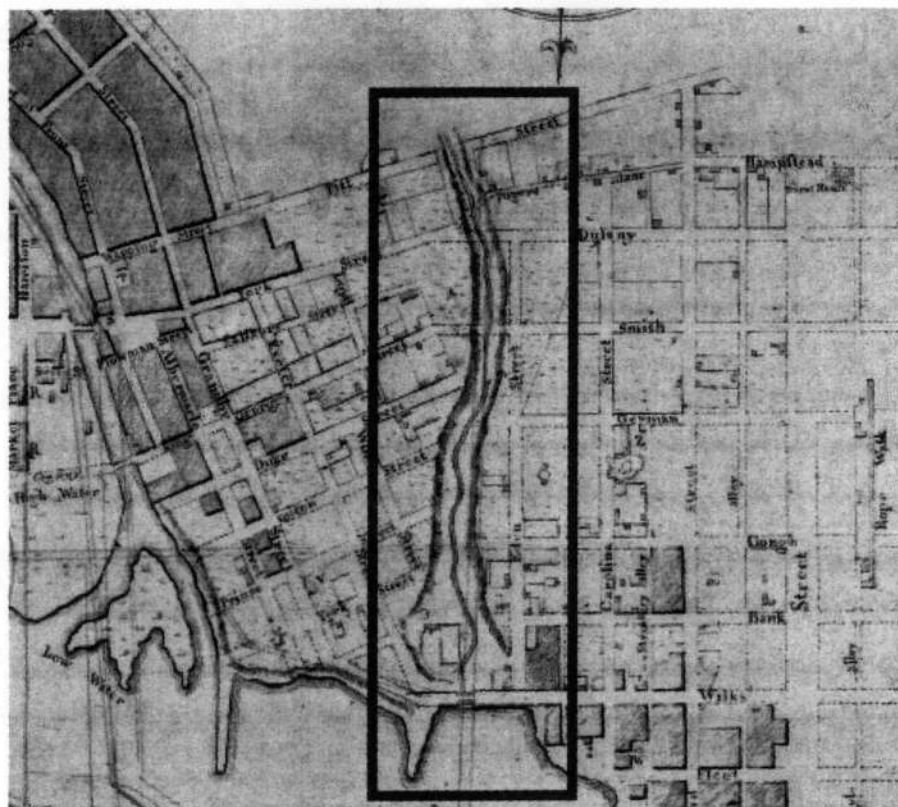


Figure 1. 1792 plat of Baltimore, Maryland by Frenchmen A.P. Folie and James Poupard. Basemap courtesy of the Library of Congress. Map shows the sinuous path of Harford Run prior to its conversion into a canal.



Figure 2. 1822 map of Baltimore, Maryland by Lucas Fielding and engraved by the B.T. Welch & Co. of Baltimore. Basemap courtesy of the Library of Congress. The image reveals that Harford Run was channeled down the middle of Canal Street from Jefferson Street to the City Dock.

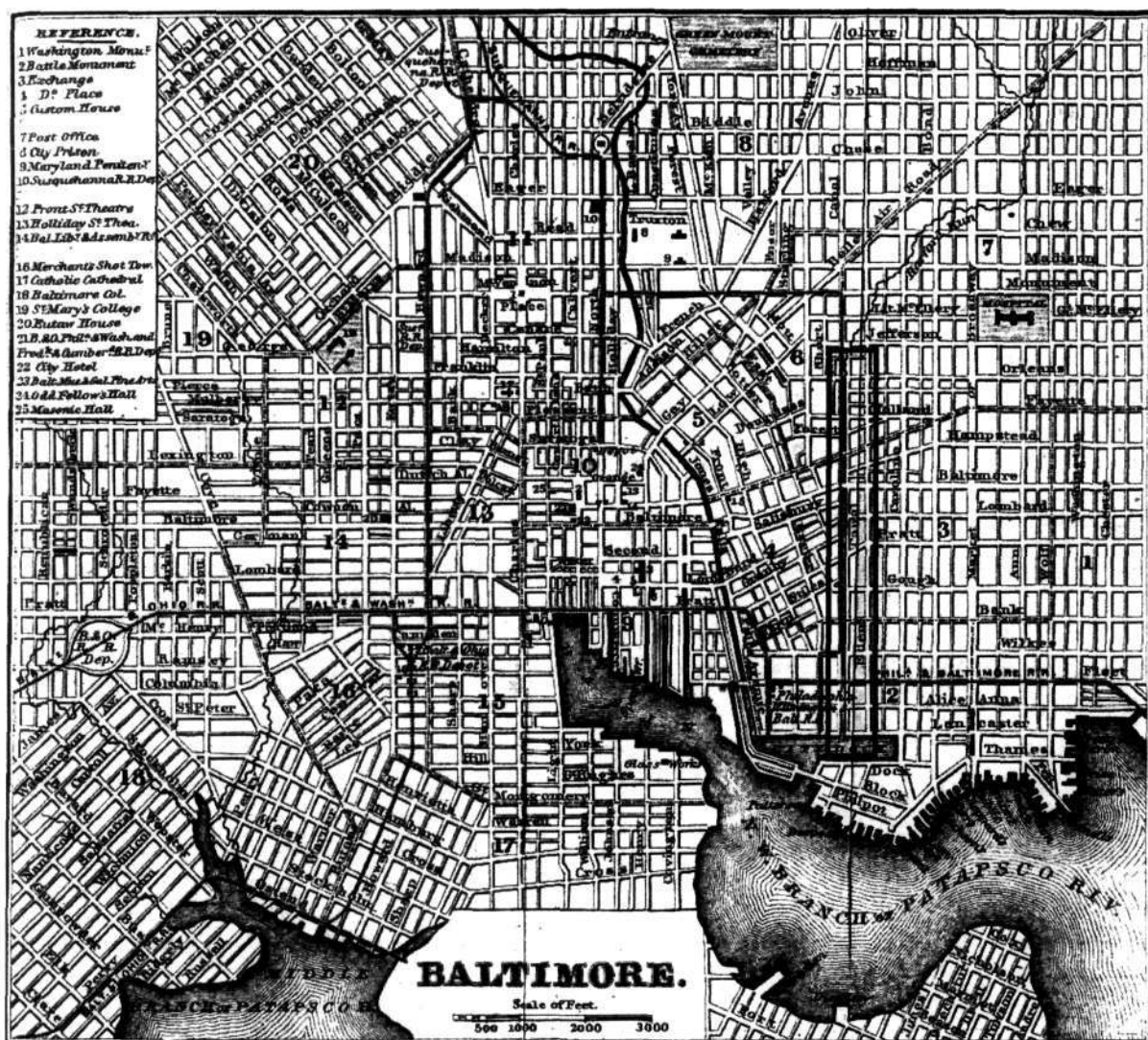


Figure 3. 1848 map of Baltimore (From Appleton's Handbook of American Travel (New York: D. Appleton & Company, 1869). Here the canal head lies just south of Orleans Street. Note the presence of a railroad or streetcar line that extends along Canal Street to Monument Street. Image courtesy of www.reisenett.no/map_collection/historical/Baltimore_1869.jpg.



Figure 4. Bird's eye lithograph of Baltimore, Maryland (published 1870) by E. Sachse & Company. Courtesy of the Library of Congress. Renamed Central Avenue in this depiction, Harford Run's channel appears to have been covered over as it is no longer visible above Eastern Avenue.

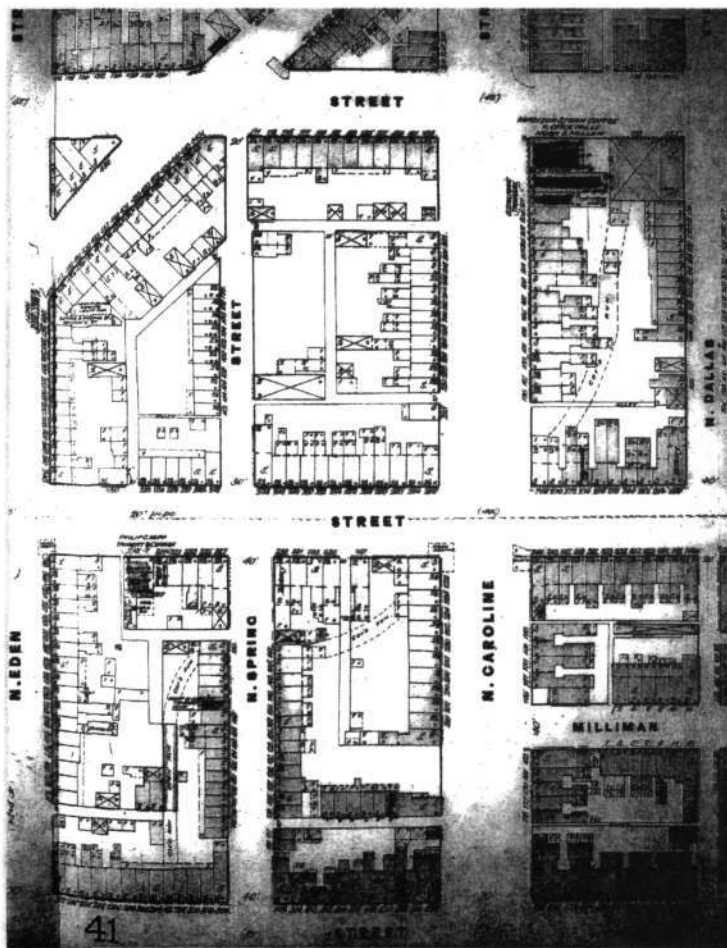


Figure 5. 1880 Sanborn Map Company map of Baltimore, Volume 2. Note the path of Harford Run Drain as it winds through the regular city grid. A portion of the run has been left open on the block bounded by North Spring and North Eden Streets.

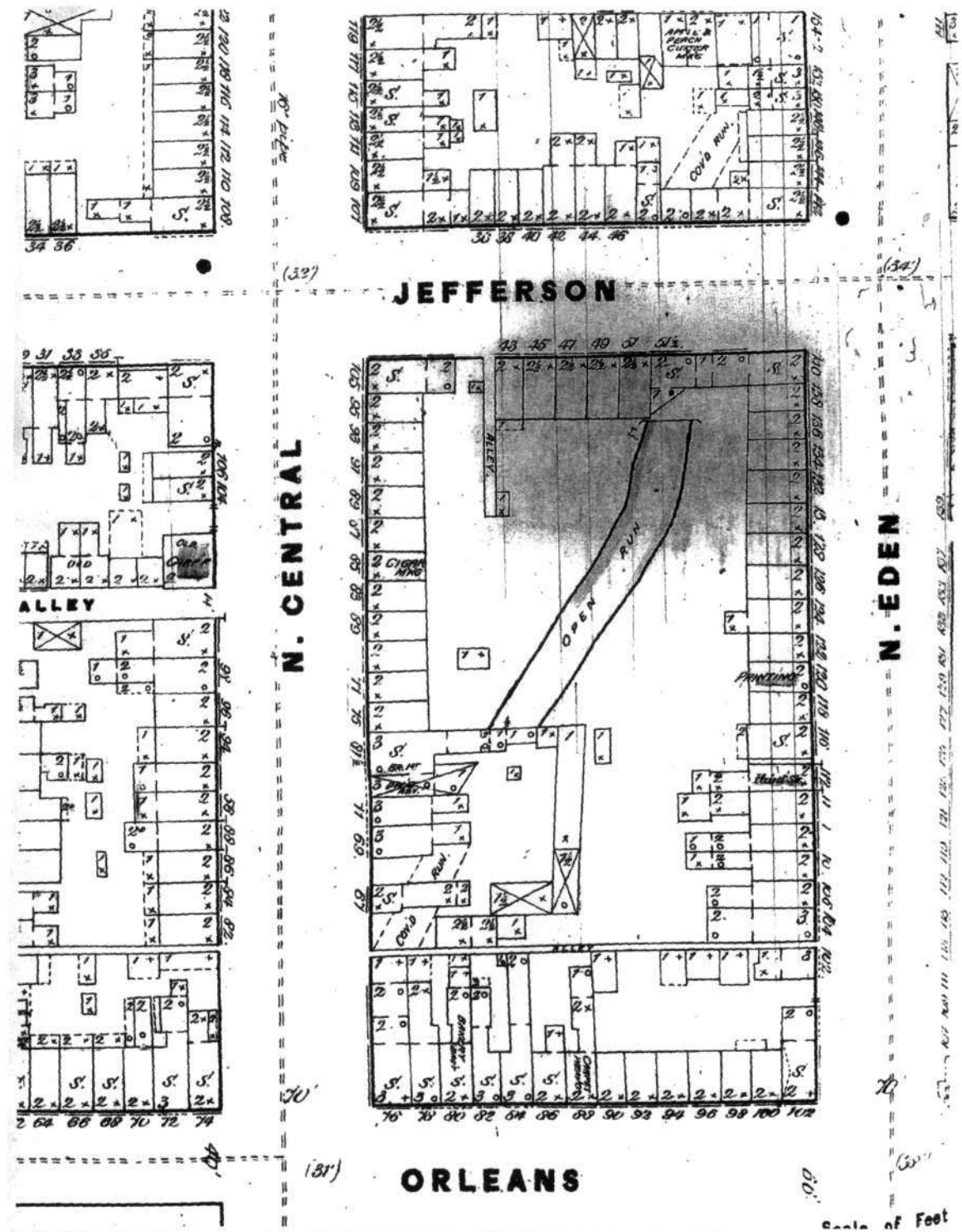


Figure 6. 1880 Sanborn Map Company map of Baltimore, Volume 2. Harford Run just prior to the channel under Central Avenue. Note how much of it has been left open.

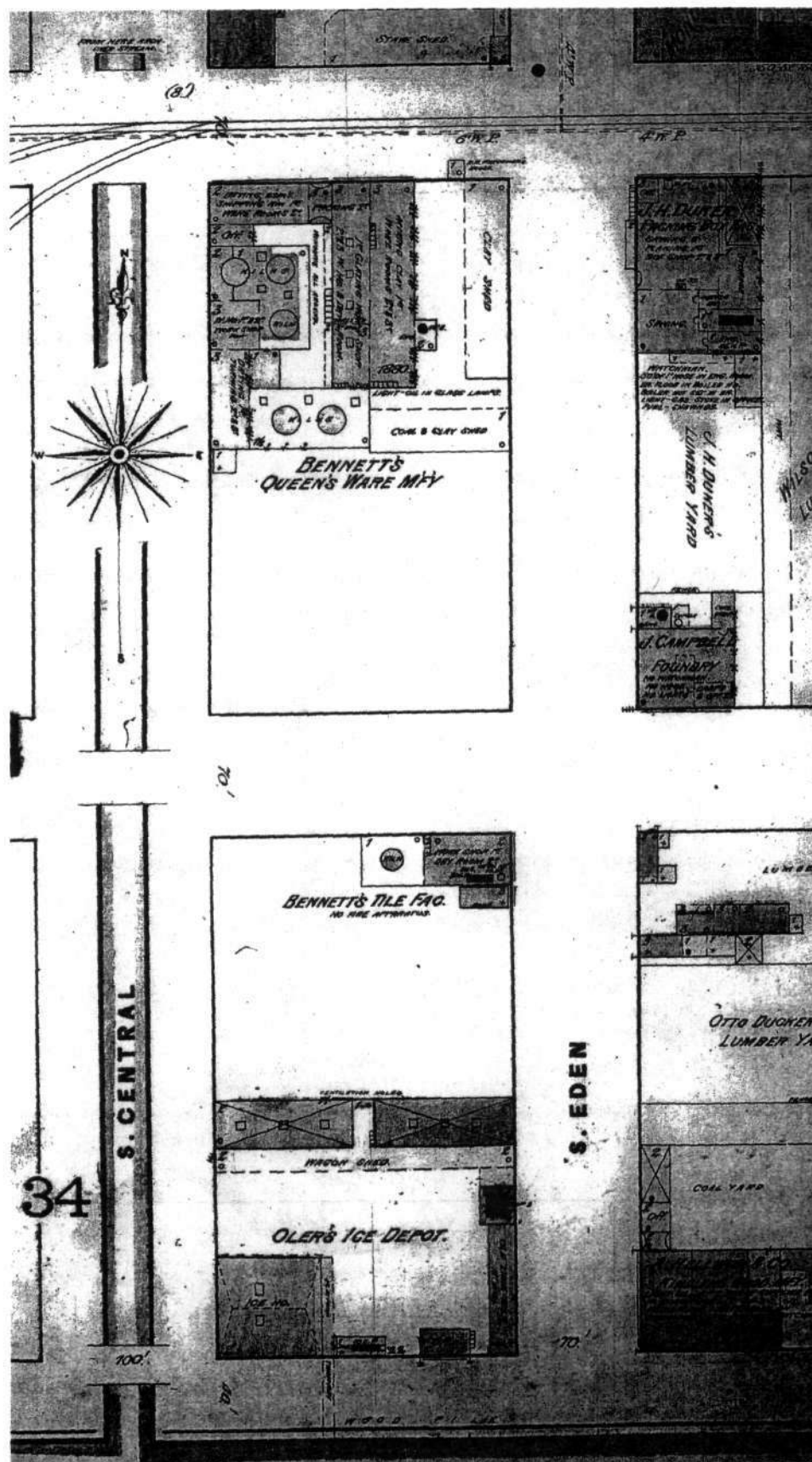


Figure 7. The Central Avenue canal at its confluence with Baltimore harbor. 1880 Sanborn Map Company, Baltimore, Maryland. Volume 2.

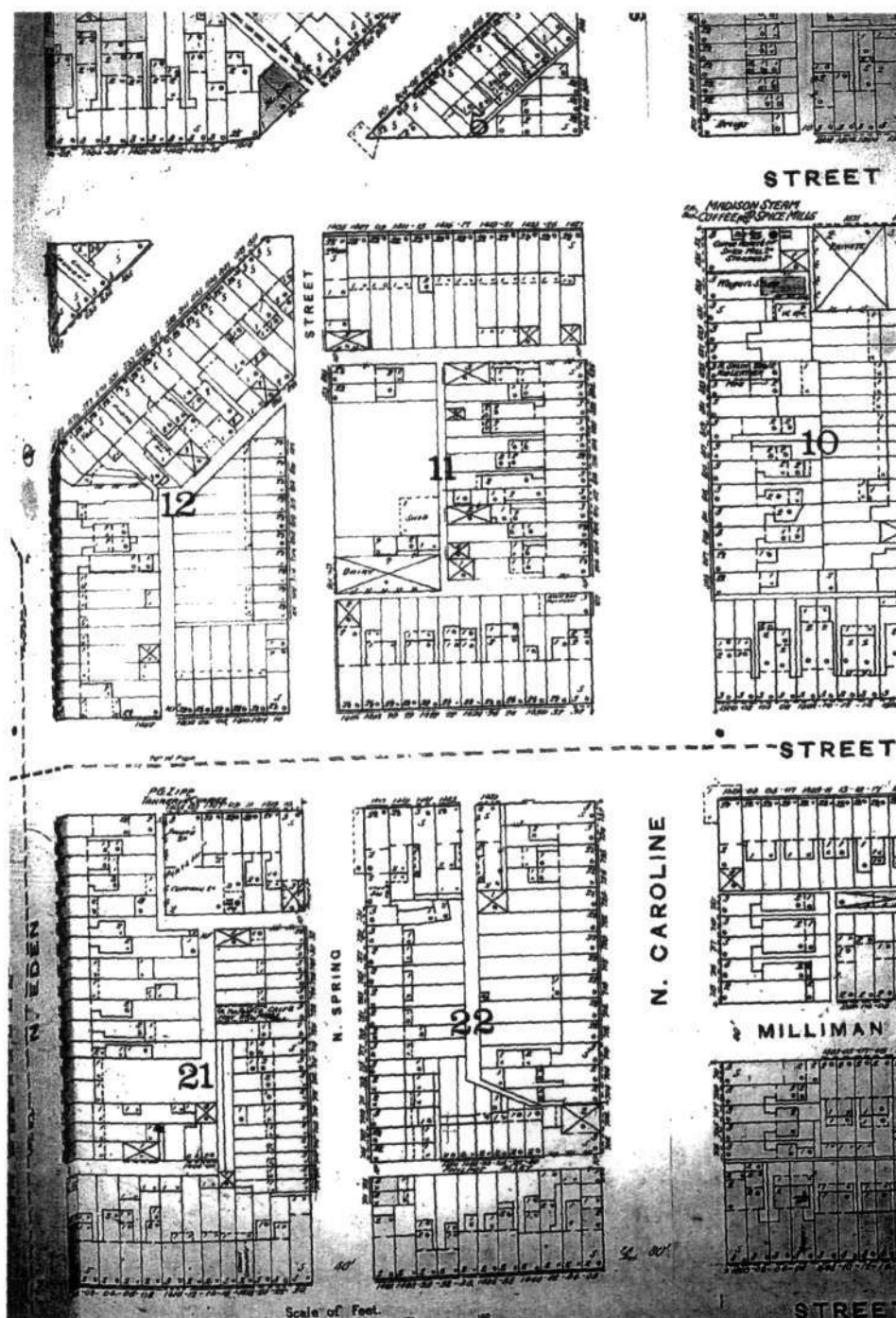


Figure 8. 1890 Sanborn Map Company map of Baltimore, Maryland. Volume 2. When compared to the 1880 map of the same blocks (figure 5), this map reveals the complete enclosure of Harford Run's northernmost course into a subterranean drainage system.

MIHP No. B-5054

Harford Run Headwall and Drain

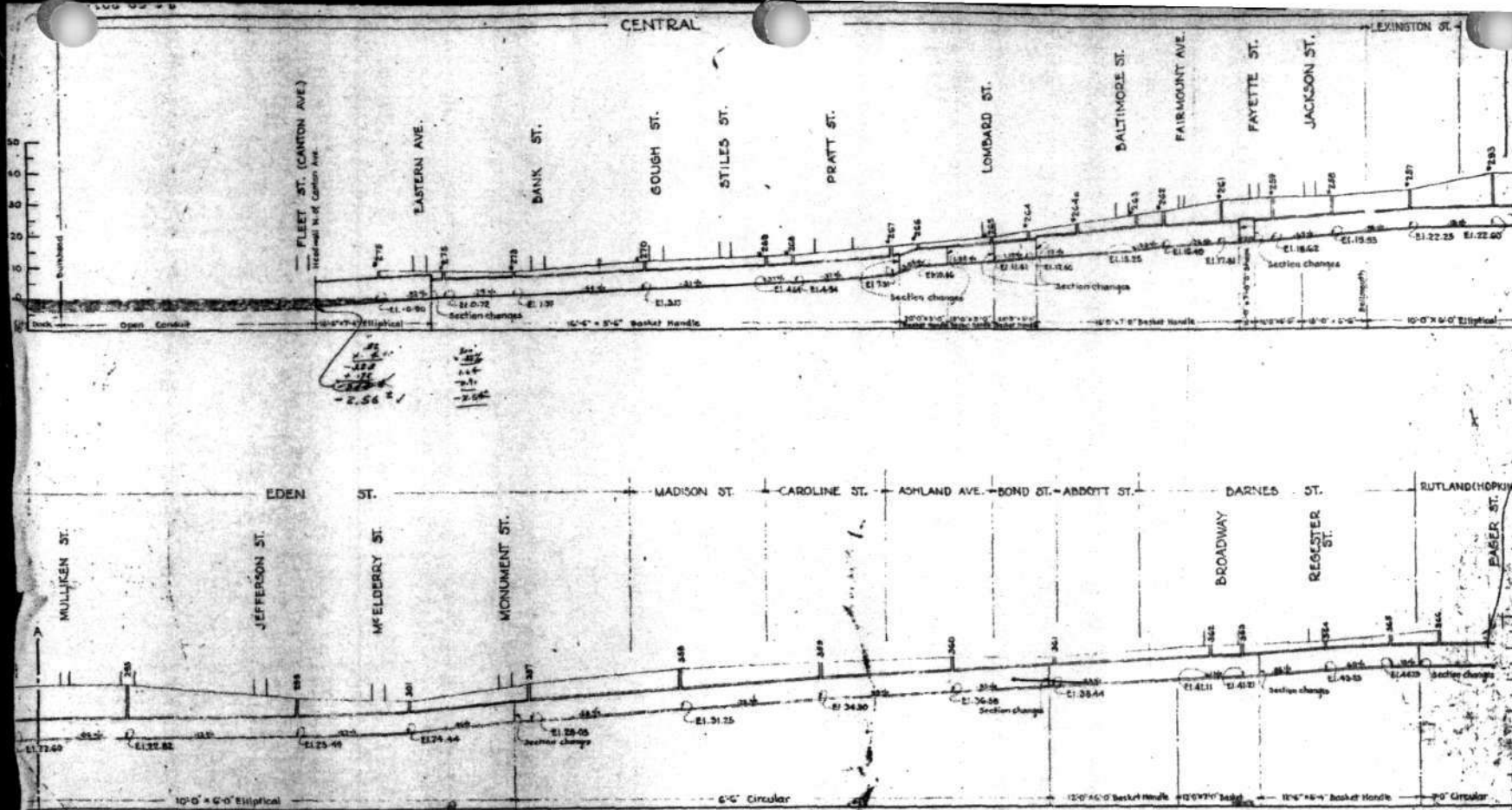
Baltimore City, MD

Rob Tucher

April 2004

MD SHPO

Profile and Sections of Central Avenue Drain, Lombard to Bank Streets



See Atlas No. 1 for plan & sections:
(Note on original)

See also B.S.-80-26468
B.S.-80-26502
B.S.-80-26503
B.S.-80-27171
B.S.-80-27806
B.S.-80-28189
B.S.-80-28581

Traced from Balto. Sewerage Commission
Profile Drawing No. 11,1364
Dated Nov. 23, 1908

CITY OF BALTIMORE
DEPARTMENT OF PUBLIC WORKS
BUREAU OF SEWERS

PROFILE OF
CENTRAL AVE. AND EDEN ST. DRAIN

SCALE: Horizontal 1" = 200'
Vertical 1" = 10'

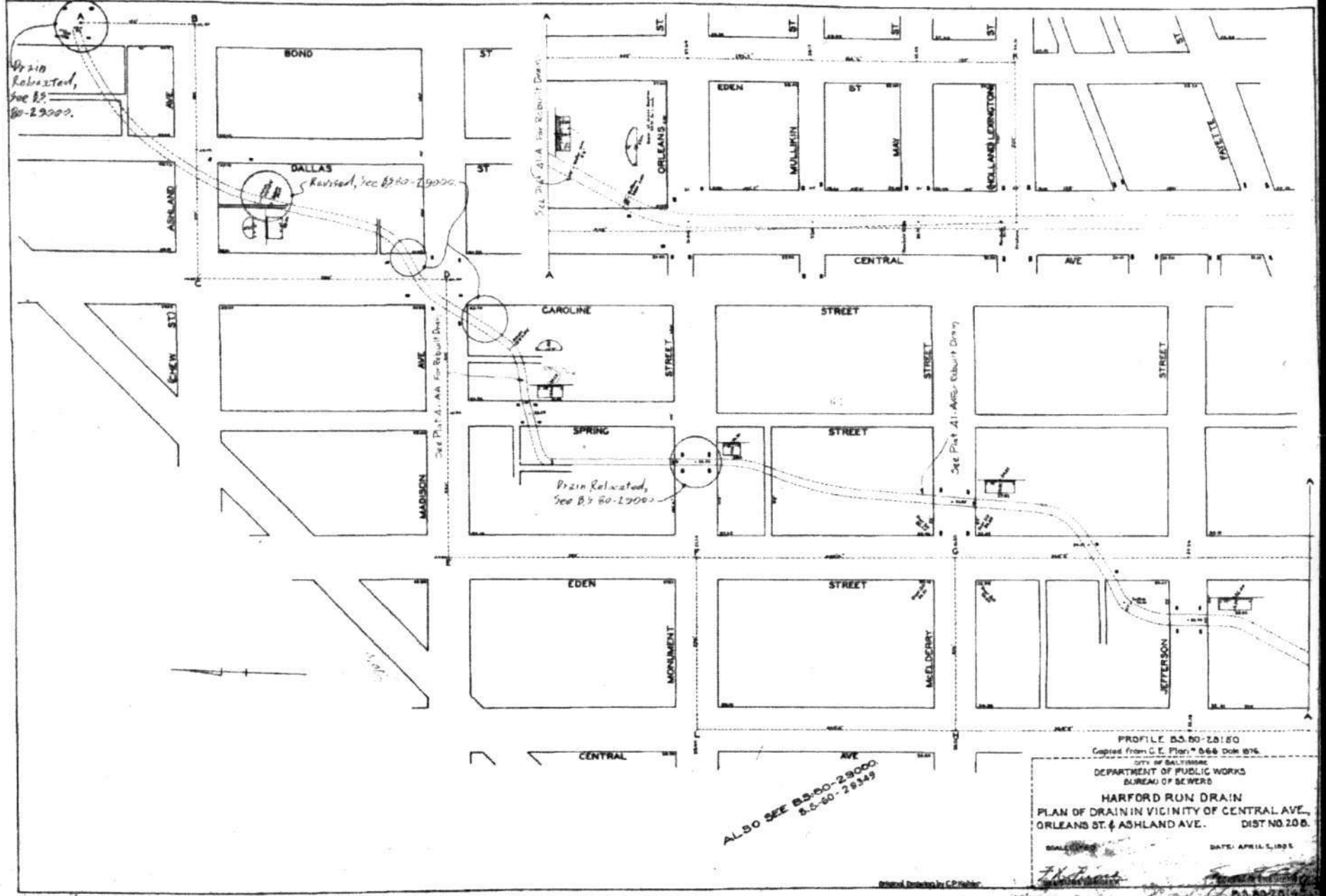
DATE: Dec. 1, 1908

B.S.-80-28581

DRAWN BY
TRACED BY
CHECKED BY

B-5054

B.S. 80-28149



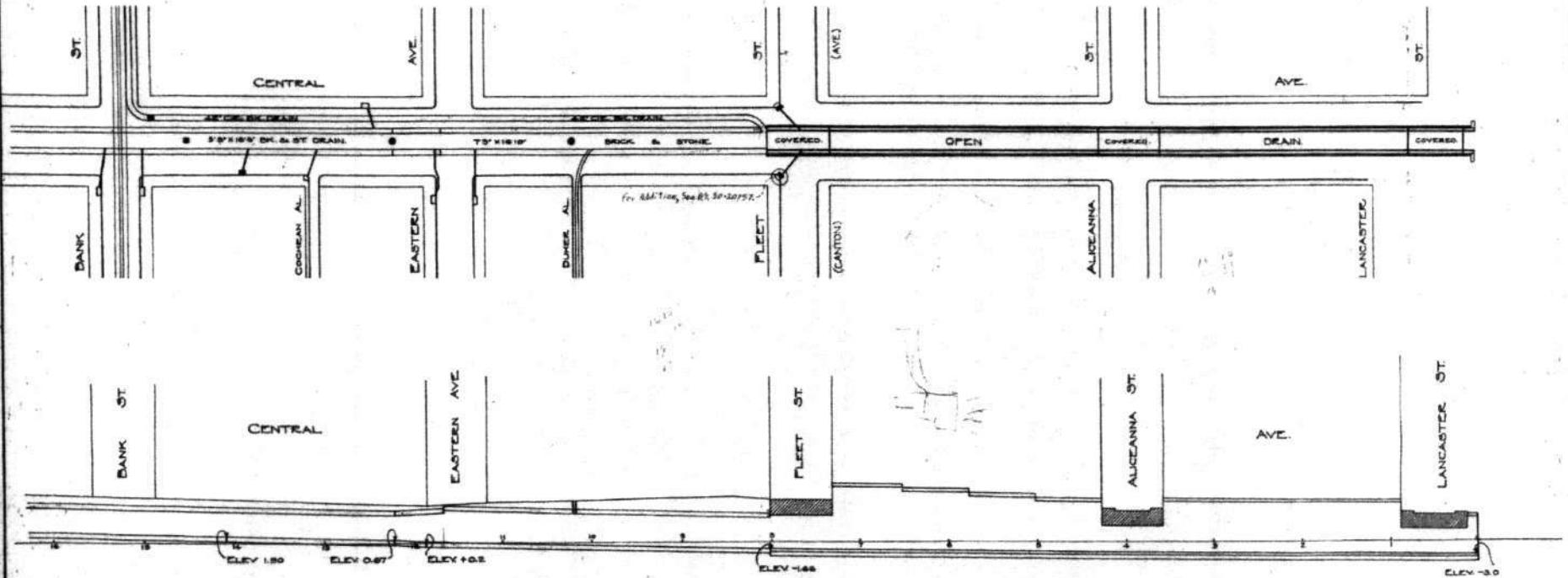
ALSO SEE B.S. 80-29000
B.S. 80-29349

PROFILE B.S. 80-28150
Copied from C.E. Plan No. 868 D.M. 1916
CITY OF BALTIMORE
DEPARTMENT OF PUBLIC WORKS
BUREAU OF SEWERS
HARFORD RUN DRAIN
PLAN OF DRAIN IN VICINITY OF CENTRAL AVE.,
ORLEANS ST. & ASHLAND AVE. DIST NO. 208.
SCALE: 1" = 40'
DATE: APRIL 5, 1925
B.S. 80-28149

B-5054

15591-06551

LEGEND
 DRAINAGE SYMBOLS
 1. DRAIN
 2. MANHOLE
 3. STREET & TRAILWAY
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 99. STREET & TRAILWAY
 100. STREET & TRAILWAY



For Bridge Over Harford Run (Central Ave.) at
 Aliceanna St. See B.S. 80-20735

See also B.S. 80-20735

NOTE: 1-25-1955
 ORIGINAL DRAWING NOT LOCATED, BUT BETWEEN
 FLEET ST AND EASTERN AVE. EXISTENTLY FROM
 G.E. PLAN 1403, ACCORDING TO INDEX CARD.

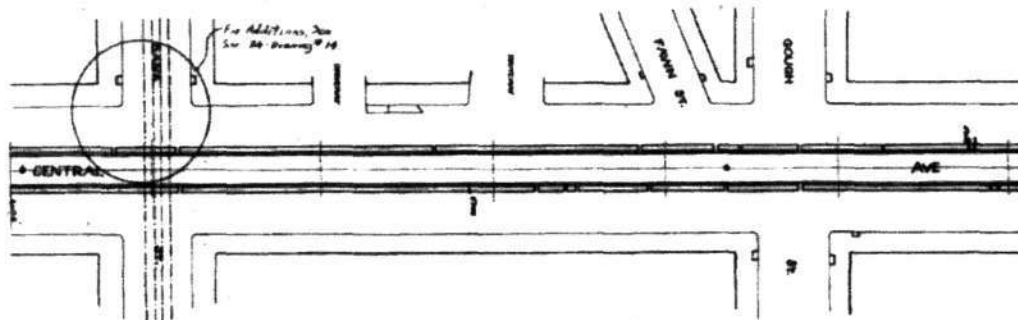
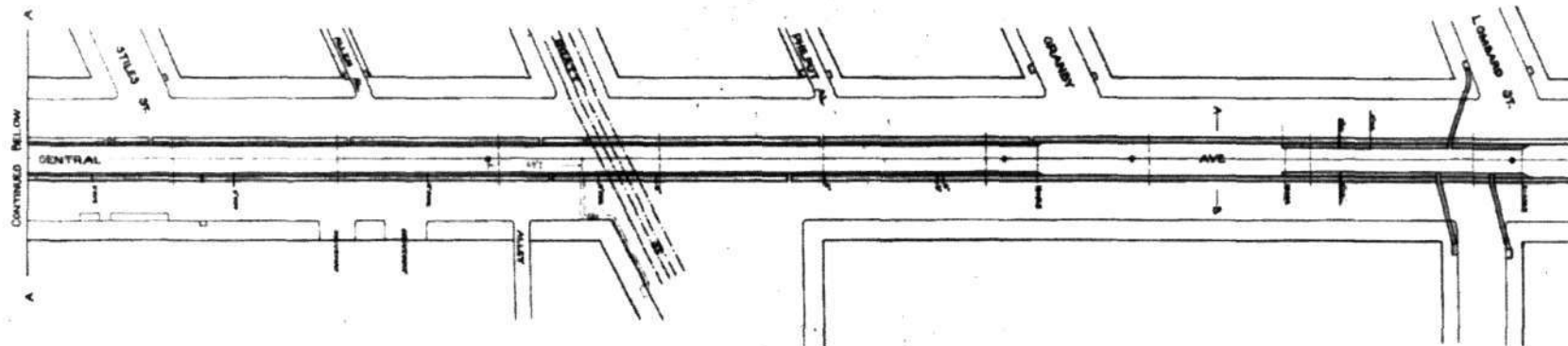
TRACED FROM PLAN NO. SEE NOTE
 DEPARTMENT OF CITY ENGINEER
 BALTIMORE
DRAIN IN CENTRAL AVE.
FROM BANK TO LANCASTER ST.
 SCALE: HORIZ. 1" = 30' VERT. 1" = 10'
 CORRECTED: OFFICE
 Drawn by: Traced by: Checked by:

FILED IN BUREAU OF SEWERS

B.S. 80-285519

B-5054

10531 09 5 2



RECONSTRUCTED 1900-1902

FOR PROFILE SEE B-5-80-26500
TRACED FROM CITY ENGINEER'S DRAWING NO. 2
CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF SEWERS

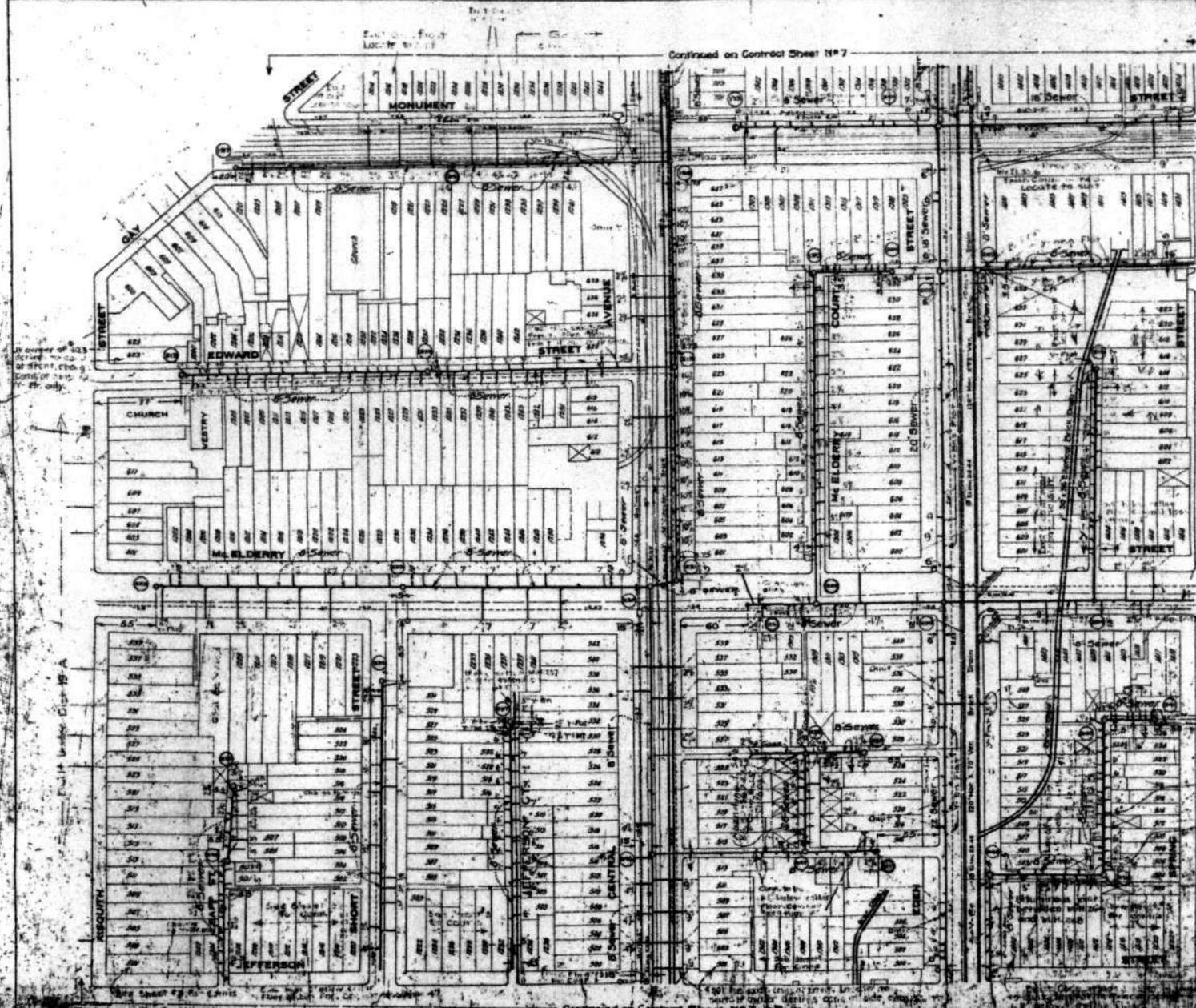
PLAN OF CENTRAL AVE. DRAIN
LOMBARD TO BANK STREETS
DISTRICTS 20-A & 21

Scale 50'-1"

Date Sept 8-1900

B-5-80-26500

B-5054



Note: Between R. H. 214 and 215, omit construction until line 200 of M.H. 203 is open and street cover is replaced.

- PAVING NOTE -
City St. drainage ditch on top of street. All other streets closed to traffic.

KEY

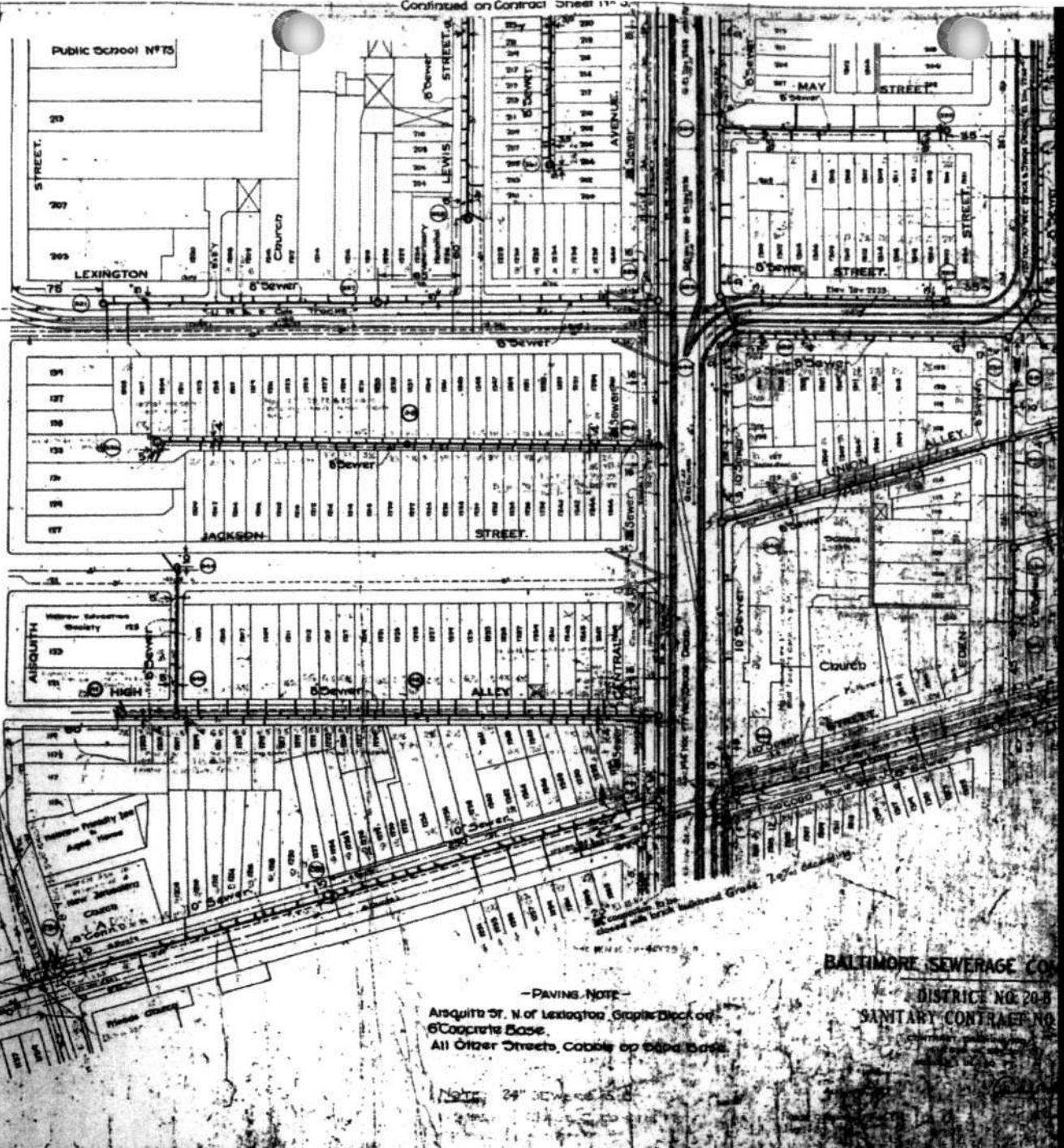
See map of Baltimore, Maryland, for location of this map. The map shows the location of the sewer lines and the location of the streets. The map is divided into several sections, including Monument, Court, and Jefferson. The map shows a grid of streets with lot numbers and sewer line layouts. Key streets include Monument Street, Court Street, and Jefferson Street.

Locate forms 18" below
prior floors. Cov. not
less than 4"

NOTE:
Read the map carefully and compare it with the actual conditions on the ground. If any discrepancy is found, the engineer should be notified immediately. The map is not to be used for any other purpose than the one for which it was prepared.

BALTIMORE SEWERAGE COMMISSION
DISTRICT NO. 203
SANITARY CONTRACT NO. 203
CONTRACT NUMBER 203
SHEET 11 OF 12

B-5054



STREET LIGHTS SHOWN
STREET LIGHTS SHOWN

Go to 2nd floor
for more details

-PAVING NOTE-
Asphalt Dr. N of Lexington, Gravel Deck on
Concrete Base.
All Other Streets, Cobble or Sand Base.

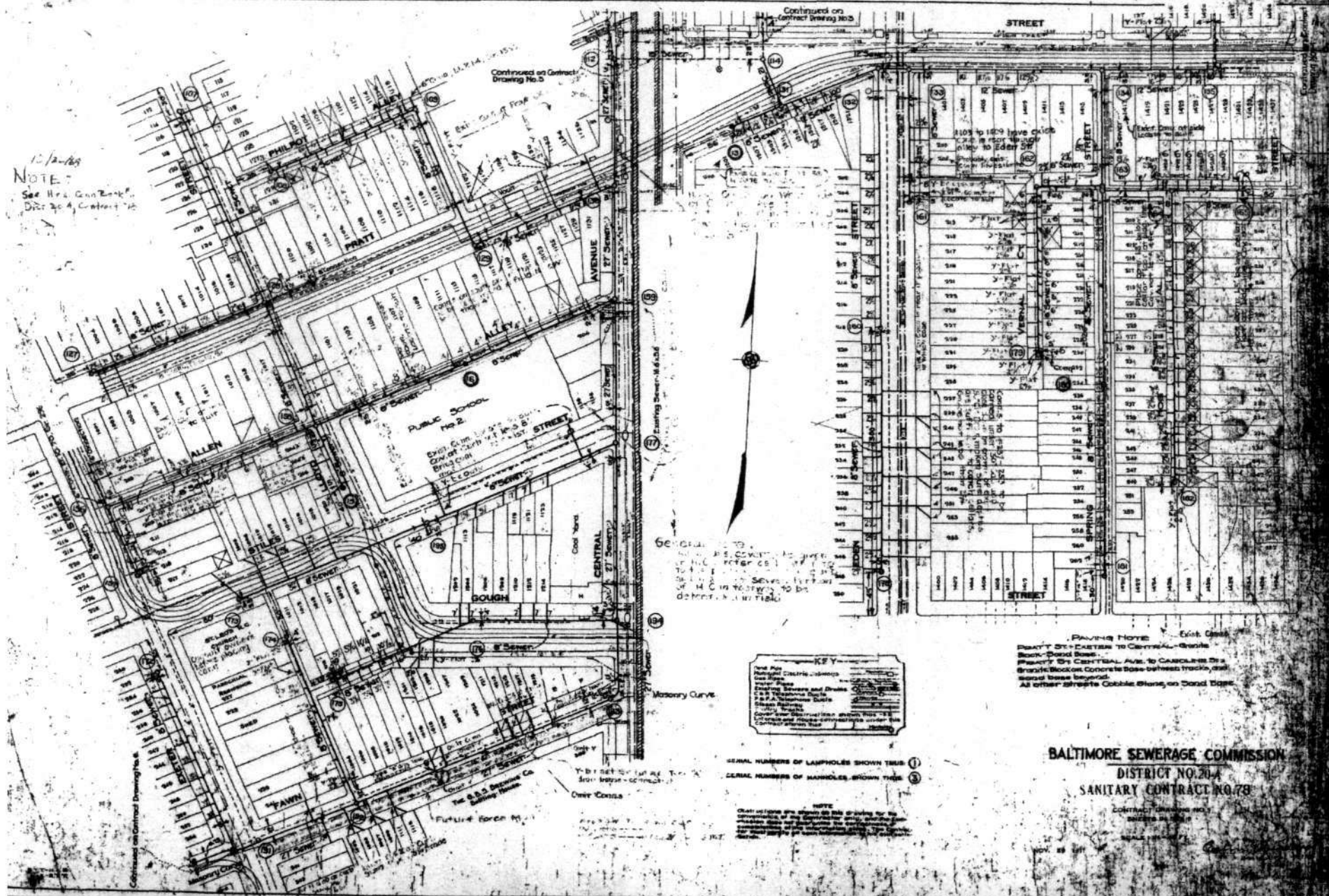
BALTIMORE SEWERAGE CO.
DISTRICT NO. 20-B
SANITARY CONTRACT NO.

NOTE: 24" SEWERAGE

8-5054

B-5054

B-5054

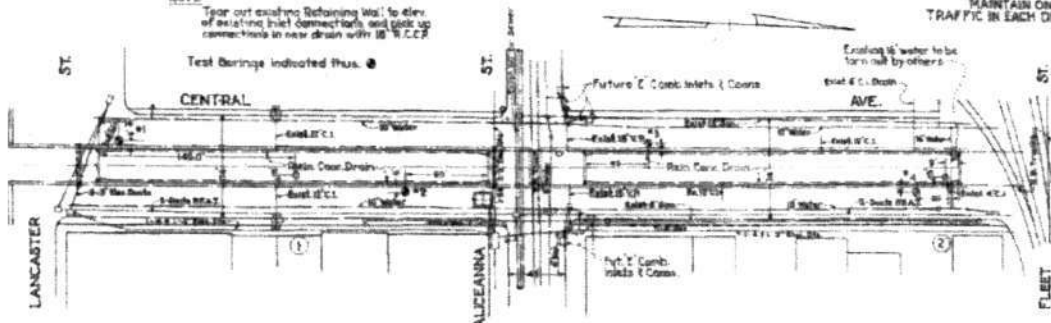


B-5054

NOTE

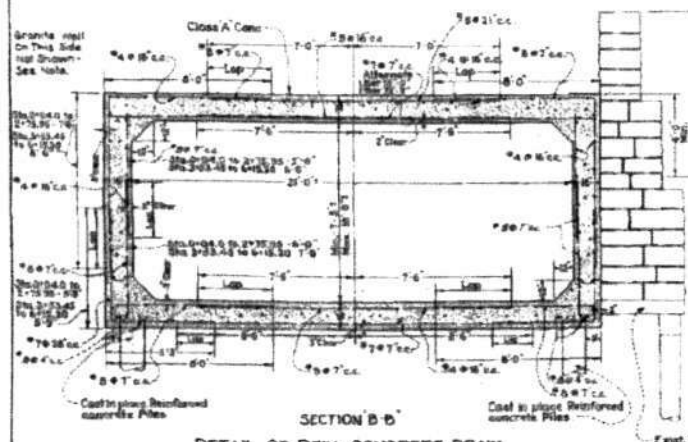
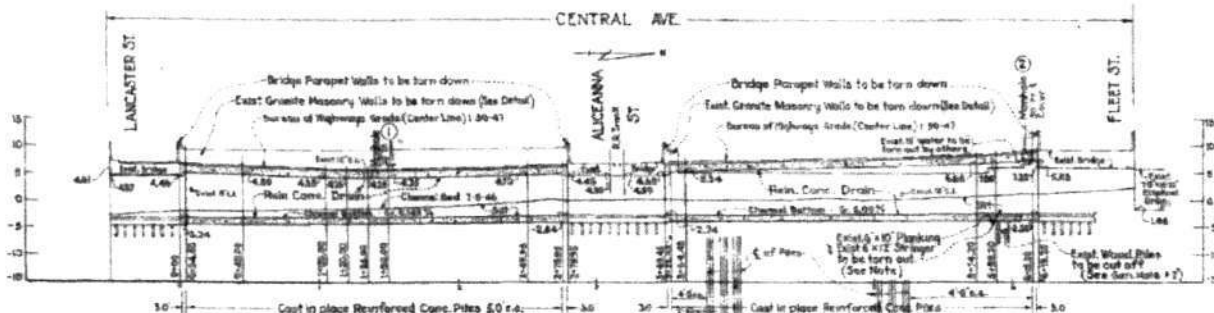
1. Tear out existing retaining wall to elev. of existing level, connect to, and cast up connections in new drain with 10" R.C.C.P.

Test Barring indicated thus: Φ



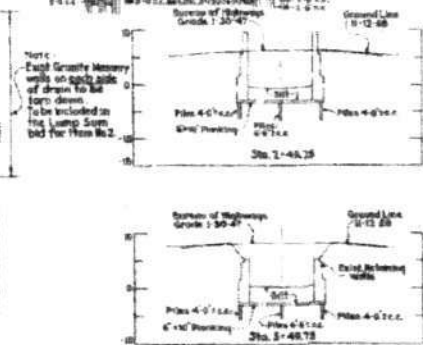
TRAFFIC NOTE

MAINTAIN ONE 12-FT. LANE FOR TRAFFIC IN EACH DIRECTION



SECTION B-B
DETAIL OF REIN. CONCRETE DRAIN

Scale: 1/2" = 1'-0"



CROSS SECTIONS
OF EXISTING CHANNEL

Scale: 1/2" = 1'-0"

GENERAL NOTES:

- Where piles are to be driven, 24 inch openings shall be cut in the existing timber platform.
- The existing timber piles in the center of the channel shall be cut down to an elevation which is at least 5 inches below the elevation of the outside bottom of the new drain. (See Note 1).
- No more than the existing timber platform shall be removed at any one time than the length necessary to permit the construction which will immediately follow such removal.
- Special care shall be exercised within 25 ft. of the existing bridge as to not affect the stability of the existing channel walls under these bridges.
- Soil shall be removed from bottom of existing channel under bridges at Lancaster St. and Alceanna St. Cost shall be included in unit price bid for item No. 1.

NOTE: Construction is shown in this drawing for the convenience of the Contractor only, and the City does not warrant or guarantee the construction or the maintenance of the information given. The Contractor must verify all such information in the field.



Scale: Vertical 1" = 8'-0"

Classifications are made by visual inspection. Water levels (W.L.): Figure indicates time of reading (hours); other completion of boring. Figures in right hand column indicate number of blows required to drive 1' O.D. sampling pipe one foot, using 140 lb. weight falling 30 inches.



LOCATION MAP

Scale: 1" = 100'

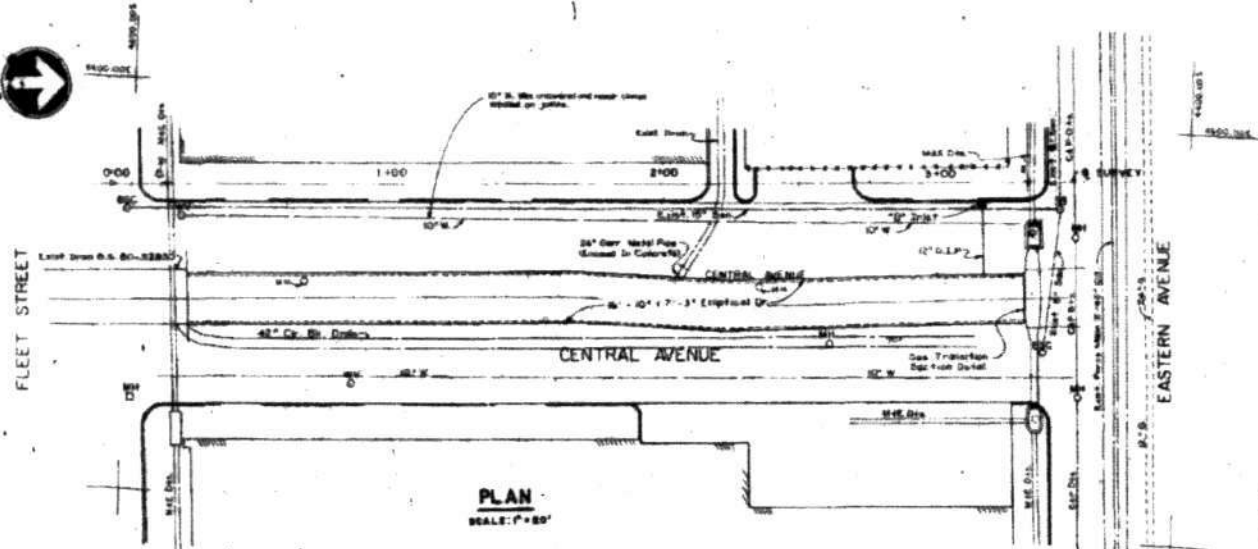
STORM WATER CONTRACT NO. 388
LOCATION: CENTRAL AVE FROM FLEET ST. TO LANCASTER ST.
SHEET NO. 1
DATE: 10/1/54
BY: J. H. [Signature]
CHECKED BY: [Signature]
APPROVED BY: [Signature]



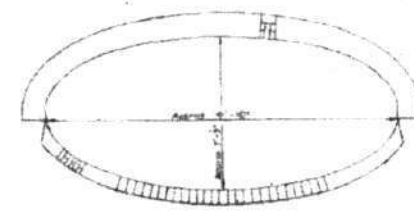
FLEET STREET

EASTERN AVENUE

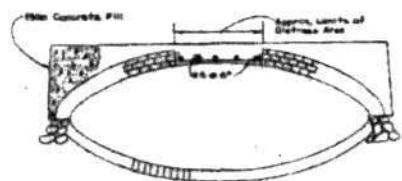
REVISIONS		DATE	BY
NO.	DESCRIPTION		



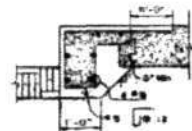
PLAN
SCALE: 1" = 80'



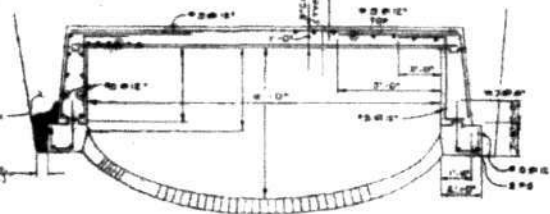
ORIGINAL SECTION



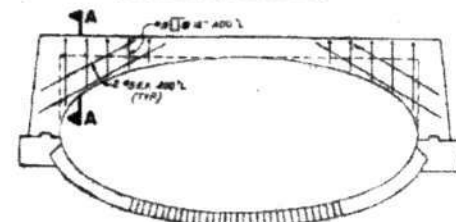
TRANSITION SECTION
At Eastern Ave. Duct (LOOKING NORTH)



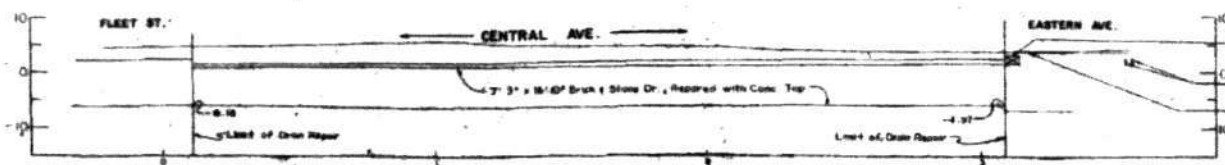
SECTION A-A



TYPICAL SECTION



END SECTION, FLEET STREET



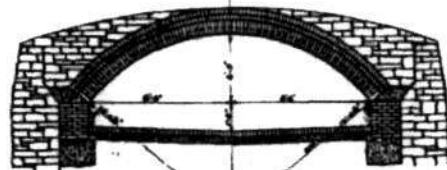
1. DUCT: MULTILAYER THROUGH
2. DRAIN: MULTILAYER THROUGH
3. PATCHED TOP OF EXIST. DRAIN UNDER
LOCATION

CITY OF BALTIMORE
DEPARTMENT OF PUBLIC WORKS
BUREAU OF WATER AND WASTE WATER

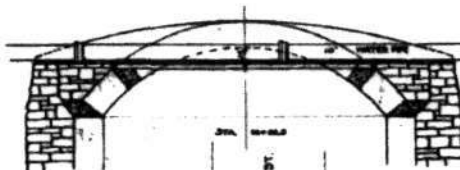
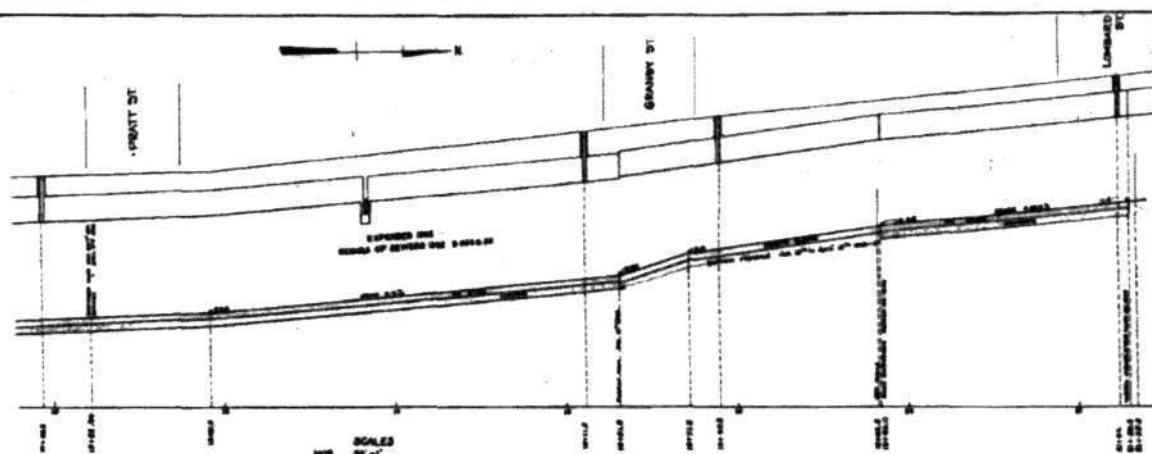
**CENTRAL AVENUE STORM
DRAIN, EMERGENCY REPAIRS
FLEET ST AND EASTERN AVE.**

DATE AS NOTED: DATE: 7/25/92
WASTE WATER ENGINEERING DIVISION: PREP: J. J. J. J.
FILE REF. W.W.D. 80-44637

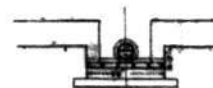
B-5054



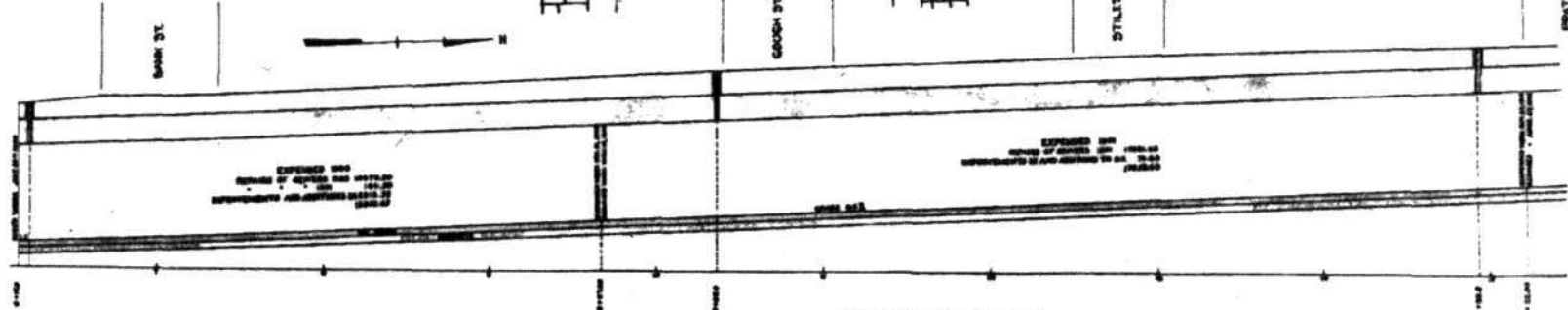
CROSS SECTION FROM 6-1125 TO 8-31.3
SCALE 3'-1"



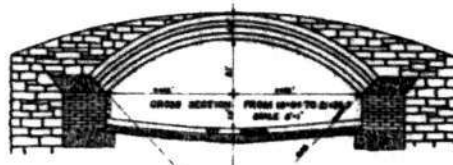
CROSS SECTION FROM 8-31.3 TO 10-10.0
SCALE 3'-1"



CROSS SECTION FROM 10-10.0 TO 11-10.0
SCALE 3'-1"



RECONSTRUCTED 1900-1902.



CROSS SECTION FROM 11-10.0 TO 12-10.0
SCALE 3'-1"



CROSS SECTION FROM 12-10.0 TO 13-10.0
SCALE 3'-1"

FOR PLAN SEE 65-60-26502
TRACED FROM CITY ENGINEER'S DRAWING NO. 2
CITY OF BALTIMORE
DEPARTMENT OF PUBLIC WORKS
BUREAU OF SEWERS

PROFILE & SECTIONS OF CENTRAL
AVE. DRAIN LOMBARD TO BANK STS.
DISTS. 20-A & 21.

Scale 3'-1"
Date Sept. 8-1900
J. J. ...

Date Sept. 8-1900

65-60-26503

8-5054

B-5054
Harford Run Headwall and Drain
Under Central Avenue
Block N/A Lot N/A
Baltimore City
Baltimore East Quad.

